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ABSTRACT

Numerous research studies indicate that vocational classrooms are subject to "negotiations" between students and teachers that have negative implications for instruction and learning. These negotiations can range from students offering nondisruptive behavior in exchange for a relaxation of academic standards to students offering certain behaviors in exchange for a release from involvement in certain problem-solving or decision-making tasks. Despite the pervasiveness of the problem, vocational teachers can renegotiate vocational instruction in a way that will increase the likelihood of their being able to engage students in the development of analytical and critical thinking skills. First, problem solving, decision making, and analytical thinking should be made an explicit part of instruction. This can be accomplished by infusing basic skills instruction into vocational course work and having students participate in group management of entrepreneurial projects. Vocational teachers must be given detailed training in the importance of analytical thinking and problem solving along with training in methods of teaching these skills to students. On the institutional level, it is important that vocational educators and policymakers make a joint commitment to providing vocational instructors with the time and resources necessary to prepare for and implement more academically integrated instruction. This could include hiring more classroom aides and/or curriculum specialists and developing entrepreneurial projects or relevant curriculum resource centers. (Document includes a 78-item reference list.) (MN)

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Renegotiating Vocational Instruction

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Paper presented at the annual meeting of
the American Educational Research Association,
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Much has been written recently about the implicit "treaties" or "bargains" students and teachers negotiate in their classroom interaction. In these negotiations, students often struggle for and teachers often offer a relaxation of academic standards in exchange for non-disruptive student behavior (see Cusick, 1983; Feiman-Nemser and Floden, 1986; Goodlad, 1984; McNeil, 1981, 1983, 1986; Powell, Farrar, and Cohen, 1985; Sedlak, Wheeler, Pullin and Cusick, 1986; Sizer, 1984). As Sedlak, et al., have written:

> In most high schools there exists a complex, tacit conspiracy to avoid sustained, rigorous, demanding academic inquiry. A "bargain" of sorts is struck that demands little academically of either teachers or students....When set at a low level, the bargain's essential features include: relatively little concern for academic content; a willingness to tolerate, if not encourage, diversion from the specified knowledge to be presented or discussed; the substitution of genial banter and conversation for concentrated academic exercises; improvisational instructional adaptation to student preference for or indifference toward specific subject matter or pedagogical techniques; and the "negotiation" of class content, assignments, and standards (1986: 5,7).

My own recent research (Claus, 1984, 1986) and the work of others suggests that vocational classrooms, too, are subject to negotiations with negative implications for instruction and learning. In an ethnographic study of a two-year, half-day secondary vocational program[1], I found that the

students and teachers often "negotiated" an avoidance of student involvement in and responsiblity for difficult problem-solving and decision-making tasks. Given that higher status jobs (as identified by higher levels of pay, autonomy, and task variety) generally involve substantial engagement in this kind of activity, this arrangement seemed to limit the students' development of skills meaningful to advancement in the world of work. It also seemed to reinforce the students' already limited view of who they were and might become in social, economic, and political terms.

Consistent with the analysis of academic classroom treaties offered by Sedlak, et al. (1986), the teacher-student negotiation I observed was rooted in a complex classroom dynamic involving a variety of social, economic, institutional, and personal factors. Many of the students, for example, came from working to lower class families in which working class job training, years of experience, and manual work were more highly valued than academic schooling as means to opportunity and success. Many of the students also tended to have poor academic records, to be in lower track academic classes, and to have experienced strained relations with some of their academic teachers and many of their more successful, higher class peers. These characteristics, coupled with the fact that so many of the students shared them, greatly influenced teacher-student interaction.

Most notably, many of the students, both as individuals and as a group, resisted tasks involving analytical thinking and difficult decision-making.[2] The students tended to see this kind of work as irrelevant and uninteresting, and they feared failure in it as an additional negative reference on their ability and character. In response, the teachers often allowed students to avoid direct engagement in and responsiblity for work of this sort. Out of respect and compassion for the students' views and previous negative experiences in school, as well as in hopes of maintaining order and a positive teacher-student relationship, the teachers often performed difficult "thought work" with and for the students. They also allowed students to negotiate deadlines and to determine their grades primarily on the basis of attitudes and social behavior.

Arrangements such as these helped relieve the students' distaste for school and their fear of academic risk-taking, and this contributed to the teachers' ability to maintain control in class by way of a friendly, supportive relationship with the students. The students consistently described these teachers as kind and helpful, often citing them as the best teachers they had ever had. However, these arrangements also allowed, even ultimately encouraged, students to withdraw from difficult problem-solving tasks. Where analytical thinking and "learning to learn" might have been promoted, students were, in a variety of ways, allowed

to avoid taking risks and responsibility. As a result, many students learned they could respond to difficult thinking tasks by turning to their superiors for the answers. An important opportunity was missed to promote the development of skills and motivation crucial both to advancement in the world of work and, more generally, to meaningful and effective participation in a democratic society. In the process, the prospects that these students would move beyond working class work and/or struggle to alter the conditions which define this work were diminished.

This conclusion is consistent with the recent ethnographic work of Roger Simon (1983) and Linda Valli (1986), both of whom have examined secondary-level work experience programs similar to the one I studied. Although neither Simon nor Valli looked expressly at the issue of teacher-student negotiation, there is evidence in their reports that students and teachers "constructed" an avoidance of analytical thinking and critical analysis of the workplace. Both authors suggest that this kind of activity in vocational education may contribute to the development of "an unquestioning, compliant labor force" (Simon, p. 246).

Similarly, there is a longstanding concern expressed in the literature -- from John Dewey (1913) to the present-- that vocational education may focus on specific working-class job training to the degree that it limits students' chances to achieve positions of decision-making and control

in their workplaces and lives beyond school. Ever since the early days of vocational education, critics have argued that it creates a dual system in which the often working to lower class students receive an inferior academic education while they train for work that offers little in the way of growth and opportunity (see Bowles and Gintis, 1976; Carnoy and Levin, 1985; Counts, 1922; Goodlad, 1984; Lazerson and Grubb, 1974; National Coalition of Advocates for Students, 1985; O'Toole, 1977; Oakes, 1985; Russell, 1938; Sizer, 1984). The view that at least some vocational programs may inhibit, rather than enhance, the development of students' analytical and critical thinking skills, thus, has both contemporary and historical foundation.

The purpose of this paper is not, however, to present evidence in support of this view; others and I have done that elsewhere. Rather, it is to outline a set of practical recommendations which address vocational instruction from this perspective. I would like to focus here on some ways in which vocational instruction might currently be "renegotiated" given the foregoing concern.

Recommendations

The goal of the proposed recommendations is to increase the likelihood that all vocational programs will effectively engage students in the development of analytical and critical thinking skills. I begin with the assumption that this

is an attainable goal worthy of vocational educators' direct attention. The recommendations are based on the aforementioned ethnographic research and on other studies specifically relevant to vocational education (e.g. Advisory Commission on Vocational Education, 1968; Copa, 1987; Copa, Plihal, and Johnson, 1986; Department of Education, 1981; National Institute of Education, 1981; Rogers, 1973; Silberman, 1986; Spence, 1986). They also draw on a body of literature offering relevant analyses of work and employment programs (Behn, et al. 1974; Hamilton, 1982; Hamilton and Claus, 1981, 1985; McArthur, 1980; O'Toole, 1977, 1979; Walther, 1976) and on the current literature concerning classroom negotiations and educational reform (especially Goodlad, 1984; McNeil, 1983, 1986; Oakes, 1985; Powell, et al., 1985; Sedlak, et al., 1986; and Sizer, 1984).

The recommendations fall into three categories: 1) those that concern classroom instruction directly, 2) those that address the pre-service and in-service preparation of vocational instructors and administrators, and 3) those that attend to institutional level support of what is desired in classrooms. One could easily go beyond vocational instruction to address such issues as tracking in the academic curriculum and unequal economic opportunity -- these arrangements have a profound effect upon what happens in vocational classrooms -- nevertheless, the intention here is to present recommendations with immediate, practical appeal which may

also relate, at least somewhat indirectly, to these larger concerns.

Vocational Classrooms. Regarding vocational classrooms, there are three interrelated recommendations. The first is that problem-solving, decision-making, and analytical thinking be made an explicit part of instruction. Vocational education is, generally, experiential in nature, and inquiry and reflection are crucial to the success of this kind of learning. Dewey (1938) argued that experience is educational only when it involves investigation of an issue or problem and when generalizations are drawn from the experience in a process of reflection which leads to additional learning and purposeful action. Dewey also made clear his belief that it is "the business of the educator to see in what direction an experience is heading" (1938, p. 38). The role of the teacher, in this view, is to guide students in their experiential activities toward analysis, generalization, and subsequent application of what has been learned.

Many others have also recognized this need in experiential learning to combine problem-solving or inquiry with guided, reflective discussion for the purpose of developing knowledge and skills which can be meaningfully applied in other situations (e.g. Boud, Keough, and Walker, 1985; Coleman, Livingston, Fennessy, Edwards, and Kidder, 1973; Hamilton, 1980; Jackson, 1973). In addition, in the recent

literature concerning curricular and instructional reform, there is a clear call for greater emphasis on the teaching of "thinking skills." This literature generally argues that "today's students may be failing to develop effective thinking and problem-solving skills" (Bransford, Sherwood, Vye, and Rieser, 1986, p. 1078). Not surprisingly, this is thought to reflect poorly on our prospects as a complex society in a rapidly changing world (see Bracey, 1983; Goodlad, 1984; Lazerson, McLaughlin, McPherson, and Bailey, 1985; Powell, et al., 1985; Sizer, 1984).

My research and my reading of the relevant literature suggest that active instruction in the skills of inquiry and reflection may not be a regular part of many students' vocational education experience. Thus, I recommend that vocational educators work to restructure instruction so as to allow for more conscious attention to the process of problem-solving and reflective analysis. Students should be taught the techniques of inquiry, in the context of their area of study, and they should be required to use and demonstrate them. This could be done in a variety of ways, with specific approaches left to individual instructors, but consistent across all instruction should be strong guidance for students, working both as groups and as individuals, to think through and learn broadly from the problems they encounter in their work.

In support of this goal it is important that vocational educators also attend specifically to the development of students' basic computation and literacy skills. In my ethnographic study one of the key reasons students shied away from difficult problem-solving was that it often involved the use of basic language and math skills the students had not mastered. It was especially at these points in the problem-solving process that the students turned to their teachers. Basic skill problems often seemed to trigger disengagement before the broader issues of inquiry could be addressed.

The vocational classroom presents a unique opportunity to teach basic skills. Measurement and pricing require math skills; record keeping and communicating effectively in the course of work involve verbal and written skills; understanding manuals, plans, and written directions requires reading skills. In short, basic skill instruction can be logically and practically linked, in vocational education, to job-relevant experiences the students find meaningful and motivating.

Along with numerous other writers, then, I recommend that vocational educators work to integrate basic skill instruction into all vocational courses (see Bottoms and Copa, 1983; Copa, et al., 1986; Corman, 1980; Duggan and Mazza, 1986; Lotto, 1983; Owens, 1987; Pritz and Crowe, 1986; Spence, 1986). I also recommend that this integration take

two forms. First, I think basic skills, as set in the context of each occupational area, should be taught directly by setting aside time for focused, but integrated, instruction. In addition, I think instructors should spontaneously introduce brief basic skill lessons into appropriate work situations. If, for example, a student is having difficulty pursuing a work task due to basic skill problems, the teacher should intervene with specific basic skill review.

My final recommendation for the vocational classroom is that students be given an opportunity to participate in the group management of entrepreneurial projects. A federal report supports this view, observing that entrepreneurial programs involving students in managerial decision-making tend to have strong records regarding the employment and attitudes of graduates (Department of Education, 1981). Similarly, evaluations of federal work programs for "at-risk, disadvantaged" youth suggest that the entrepreneurial approach can be an effective way to improve the training and employability of these youth (see Hamilton and Claus, 1981, 1985; Levin, 1983; and McArthur, 1980).

Many vocational programs already involve students in real work or work-like situations, but it appears that students much less frequently participate at the level of management or work as a group to make managerial decisions. These activities offer meaningful preparation for advancement in and improvement of the workplace. Students learn

not only to perform fundamental work tasks, but to gather broad economic information, to market a product, to negotiate with work colleagues, and to make decisions with real economic consequences. Analytical thinking, group process work, and significant responsibility are all an integral part of the experience.

Democratically-managed entrepreneurial programs also provide an opportunity to engage students in reflective thinking about the structure and functioning of our economy. Students in this kind of a program can logically be engaged, for example, in discussions of the conventional workplace hierarchy, the conditions and power relations of different kinds of work in this hierarchy, and the options for change. Democratically-run entrepreneurial projects encourage students to see themselves not just as workers who follow the directions and decisions of others, but as potential participants in the managerial process. They also introduce students to an alternative to the conventional workplace heirarchy, and in this way they may foster constructive change beyond just the improved development of individual students. While we prepare vocational students to succeed in the system they face, we must also encourage them to analyze and understand that system for the purposes of making it more humane and just. As Simon has argued (1983), vocational students must be engaged in a critical analysis of our economy and their place in it if they are to be ef-

fective in their pursuit of a better life both for themselves and others.

> If the realities of the workplace are indeed sets of social relations defined through power and in support of particular interests, to present them as if they were naturally occurring phenomena, historically neutral and obviously necessary, is to mystify people and to act to render them powerless. By helping people solely to adapt to "what is," you help to maintain what is (Simon, 1983:238).

Teacher Preparation. It is imperative, if the foregoing ideas are to be put into practice, that vocational teachers be prepared accordingly. Vocational teachers must understand the reasons for pursuing analytical thinking and know how to train students in the process of problem-solving and decision-making. They must also be prepared to teach the basic skills as part of their chosen vocational discipline, and they need to be knowledgeable of the business side of their trade. In addition, they must be able to guide students in a critical analysis of workplaces and the economy.

It follows that vocational teacher-preparation and in-service education programs must be designed in support of these goals. Vocational teachers and teacher certification students should, for example, be trained using the contemporary literature on "teaching for thinking." This literature is extensive and provides both theory/rationale and

specific ideas for classroom practice (see Beyer, 1983, 1984a, 1984b; Costa, 1985; Eggen and Kauchak, 1988; Joyce and Weil, 1986; Raths, Wasserman, Jonas, and Rothstein, 1986). Although this work does not address vocational education specifically, it can be adapted. Of importance here is that veteran vocational teachers be involved in planning these adaptations and that, ultimately, pre-service and in-service instruction demonstrate a variety of ways to make the "teaching of thinking" a natural part of vocational education.

Similarly, vocational teachers must be trained in the integrated instruction of basic skills. They should be exposed to the relevant programs and materials which already exist (see Duggan and Mazza, 1986; Lotto, 1983; Owens, 1987; Pritz and Crowe, 1986), and they should be encouraged to create their own. It is important that vocational teachers understand where and how in their vocational curriculum basic skill issues may logically arise and be addressed. Vocational instructors must be included in the movement toward training teachers to teach basic skills "across the curriculum."

Vocational teachers must also have at least a working knowledge of how to run a business in their field. They should pursue study in the area of small business management, and they should be guided in their application of this study to vocational instruction. Where possible, they

should have an opportunity to participate in field-based experiences involving work in and study of appropriate businesses.

Finally, vocational teachers must be prepared to engage students in a critical analysis of work and society. This requires that pre-service and in-service instruction include material presenting a historical and analytical view of vocational education and workplace structure (e.g. Behn et al., 1974; Bowles and Gintis, 1976; Braverman, 1974; Carnoy and Levin, 1985; Carnoy and Shearer, 1980; Counts, 1922; Dewey, 1913; Lazerson and Grubb, 1974; Mott, 1965; Oakes, 1985; O'Toole, 1977, 1979). It also requires that this instruction expose vocational teachers and teacher-prep students to the ideas presented in the recent literature on democratic education. This work suggests ways in which educators can better promote analytical thinking and social and political activism by engaging students in democratic, critical reflection (see Aronowitz and Giroux, 1985; Giroux and McLaren, 1986; Greene, 1986; Simon, 1983; Zeichner and Liston, 1987). Even if one disagrees politically/ideologically with the critical perspective of this work, it is important to acknowledge and understand it for the purposes of generating discussion and debate. It is vital that vocational students be encouraged to evaluate the workplace experience so they can and will work to improve it.

Institutional Level Recommendations. The classroom instruction proposed here also requires institutional level support and change. Vocational instructors, regardless of their training, cannot be expected to acccomplish the desired changes on their own. As much of the recent educational reform literature indicates, the problem is generally not one of bad teaching or bad students; rather, it is one of schools and their broader context having created conditions in which undesirable classroom negotiations constitute logical adaptations (see Lazerson, et al., 1985; McNeil, 1988; Powell, et al., 1985; Sedlak, et al., 1986; and Sizer, 1984).

Vocational educators and policy makers must make a commitment to providing vocational instructors with the time and resources necessary to prepare for and implement more academically-integrated instruction. There are, of course, many ways in which this might be done, but some possibilities are: to hire more classroom aides and to make sure all aides are trained appropriately; to hire curriculum specialists who might serve as school-level support staff providing teachers with help and guidance in the development of new forms of instruction; to develop entrepreneurial projects which cut across vocational training areas and are run by additional, appropriately trained staff; to develop relevant curriculum resource centers within vocational schools; to provide regular in-service workshops and in-

school planning time; and to fund summertime study and preparation. These are all fairly common ideas which if implemented even only on a modest scale might make a substantial difference without excessive cost.

On another, possibly more fundamental level, it is also important that vocational educators restructure the form in which vocational courses are offered so as to attract a more diverse group of students. This recommendation is consistent with the views expressed recently by a number of vocational educators (see Copa, et al., 1986; Silberman, 1986). It is also supported by the ethnographic analysis of vocational instruction (Claus, 1986; Valli, 1983).

One of the factors contributing to negative vocational classroom negotiation is the relative homogeneity of the students' socioeconomic backgrounds and school experience. Vocational students do tend to be working to lower class in background and to have average-to-below-average academic records (see Allan and Gorth, 1979; American Vocational Association, 1979; Campbell, 1986; Davidson and Johnston, 1976 in support of this point). In my study, these commonalities contributed to the development of a strong sense of group and belonging; however, they also served as a foundation of support for the students' negative attitudes toward academic schooling and "thought work" and for their view of themselves as working class in lifestyle and opportunity. There was, among the students, a widely shared and publicly en-

couraged rejection of academic pursuits and an acceptance of working class work and its limiting conditions. The peer interaction of the classes seemed to strengthen the likelihood that these students would remain working to lower class in their work and lives after school. Thus, it is probable that vocational instructors will find it difficult to engage their classes in more academically-integrated instruction if the present composition of these classes remains. Students will continue to have the strength of shared views and experience in support of their resistance to "thought work".

One change vocational educators could make to attract a more diverse group of students is to provide a wider range of scheduling and enrollment options. At present, many non-vocational students who would like to develop a vocational skill are deterred by programs which require a substantial time commitment. Participation in a vocational program can leave little time for the pursuit of academic interests and requirements. It can also conflict with extracurricular activities. Thus, if vocational education is to attract students from a variety of backgrounds, with a range of academic and occupational interests and skills, courses will have to be designed so students can participate in accordance with their needs and goals. Shorter and more diverse terms of instruction would be useful steps in this direction;[3] so would a movement toward greater Collaboration between and

integration of vocational and comprehensive high schools. These changes, coupled with greater emphasis on the development of problem-solving and managerial decision-making, should make vocational education a much more widely attractive option.

Conclusion

In the early 1900's John Dewey wrote:

> I object to regarding as vocational education any training which does not have as its supreme regard the development of such intelligent initiative, ingenuity and executive capacity as shall make workers, as far as may be possible, the masters of their own industrial fate (Dewey, 1977: 38).

Current research suggests we could do much to improve conditions in pursuit of this goal, and so I have tried here to outline some ways in which vocational educators might begin to do this. It seems imperative, if vocational education is to serve students well in their lives following school, that it enroll a wide range of students in an education broadly relevant to life both at work and in society at large. This will, of course, not always be easy -- some students and educators will certainly resist -- but recent work with vocational educators suggests this is not just an outsider's view and concern. There is support among contemporary vocational educators for addressing these issues in many of the ways recommended here (see Copa, et al., 1986; Silberman, 1986; Spence, 1986).

In the recent educational reform literature there are those who have suggested that vocational education be cut back or eliminated altogether. Adler (1982), the Carnegie Council (1979), Resnick and Resnick (1985), and Sizer (1984), for example, have argued either explicitly or indirectly that the kind of students who currently enroll in vocational education would be better off pursuing an improved "academic curriculum". These proposals are well intentioned. They generally reflect aspirations for less segregation and improved academic training in our schools. However, they mistakenly fail to recognize the potential value of reformed vocational education in pursuit of these goals. Vocational education is very popular with the students it currently enrolls (Bottoms, 1979; Copa and Forsberg, 1980; Grasso and Shea, 1979; Mertens, et al., 1980). Building on this popularity, a revised or renegotiated version of vocational instruction, as outlined here, promises to engage a large and diverse group of students in academically-integrated, work-related study which emphasizes experiential learning, basic skill training, managerial decision-making, and analytical and critical thinking. This, in turn, promises a greater number of adults capable of understanding and manipulating some of the important factors which influence their lives.

ENDNOTES

1. The study was designed as a complement to a large-scale, statewide survey, the purpose of which was to determine whether students in secondary two-year, half-day vocational programs in New York State were experiencing "positive social development" in their programs. This survey involved two forms of data collection: 1) a nine-scale questionnaire administered to 2078 vocational and 1697 non-vocational seniors, and 2) interviews with 60 representative vocational and non-vocational students (30 each). The survey sample was drawn to represent the experience of seniors in the state's 52 regional vocational centers and in the "feeder" or "home" schools sending students to these facilities.

A major finding of the survey was that the vocational students liked their vocational programs and reported the development of improved attitudes toward self, school, work, and others in association with vocational program participation. The ethnographic study was designed with the intention of exploring in qualitative detail the process behind these findings. A single vocational program with two classes (one junior and one senior) was the object of ethnographic study. This program was a food preparation course offered by one of the separate regional facilities represented in the survey. Combined, the two classes enrolled 16 males and 19 females, 5 blacks and 20 whites, 20 juniors and 15 seniors.

Ethnographic data collection consisted of: observations in both classes three days a week for the first six months of school; in-depth interviews with the 35 students; interviews with the students' two teachers; a questionnaire sent to parents concerning their work, education and perceptions of opportunity, and analysis of student records and official reports on the local and national economies.

It is important to note that careful attention was given to designing the ethnographic study as a complement to the statewide survey. This was done to strengthen the "informal representativeness," or what Hamilton (1980) has called the "logical generalization" of the ethnographic findings. On a number of key variables the program and students in the study looked very much like the vocational programs and students in the survey. Additionally, and of special relevance to this paper, there was close consistency between what was observed of teacher-student interaction in the ethnographic study and how vocational students, inter-

viewed for the survey, described their relationships with their vocational teachers. Thus, the teacher-student interaction observed in the ethnographic study appears at least not atypical of and most likely similar to that experienced in many of the vocational classrooms represented in the survey.

2. By "analytical thinking and difficult decision-making", I mean problems requiring figuring and analysis not easily accomplished by rote or physical trial and error. A broad example would be having to plan a job from start to finish so as to anticipate needs and problems. A more specific example might be having to figure out how to approach and estimate the cost of an unconventional job.

3. Copa (1987) refers to this as "offering courses rather than programs." He goes on to say that "courses can offer greater flexibility and relevance to students than can programs which lock students into more rigid sequences of predetermined courses" (p. 13).

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